

One curious question still remains to be decided in the natural history of this insect, namely, the nature of the food of the larva. Although the perfect insect is generally found on warm-blooded animals and man, there is no question that it is capable of breeding to a vast extent in places not frequented by such animals. Rooms left for a long time vacant, and some hot sandy localities, may be found occasionally swarming with fleas. At all events the larvæ are never found on the animals attacked by the perfect insects. M. De France, who endeavoured to determine the question, found numerous small black grains in company with the eggs or larvæ of the flea, and which he asserts become the food of the larvæ, being nothing else than dried drops of congealed blood, which, upon being moistened, immediately re-assume a fluid state and red colour. These grains have been generally regarded as the excrement of the perfect fleas, but M. De France considers them to be in fact drops of blood which have fallen from the wounds made by the flea. My own opinion, now that the remarkably powerful structure of the jaws of the mouth has been discovered, is rather that the larvæ roam about and feed upon hairs or particles of woollen or feathers lying on the spots frequented by the animals attacked by the perfect flea.

The knowledge of these facts in the œconomy of this insect suggests that by carefully sweeping carpets, mats, &c., on which dogs or cats are in the habit of lying, and by collecting the sweepings in a dust-pan and burning them (instead of allowing the larvæ to creep away into cracks of the floor or even in the hollows between the threads of the carpet), we may destroy the larvæ in great numbers, and thus prevent them from arriving at their perfect troublesome form.—J. O. W. in the *Gardeners' Chronicle* for March 4.

*Instance of a singular Anomaly in the History of the Honey Bee.*

By GEORGE DARLING, Esq.

Mons. Huber, in his wonderful and accurate researches into the history of the Honey Bee, discovered that, if a young queen passes the twenty-first day without intercourse with the drone, she will be only partially fertile, laying nothing but the eggs of drone brood; nor does she lay these eggs in the appropriate comb, but in the comb proper for workers. This curious fact I have seen proved several times; but one not noticed by the careful Frenchman came under my observation this summer. I had placed a young queen in a small experimental hive; she was very soon impregnated, and filled a sheet of comb with eggs. I removed her to another hive, and, in the usual time, the bees turned out several young brood for queens to make up for her loss. One of these, at the proper time, emerged from the cell, and destroyed the others. Three days after hatching she began to lay eggs, and as I supposed all right, but about a week after, when I examined the hive, I found the queen thrown out, and three cells converted into royal ones; but to my surprise, I found that all the grubs were drones, both those in the forced royal cells, and those through the combs; and I have no doubt that the bees had, on finding their queen imperfect in her functions, killed and thrown her out; but here their instinct had not been sufficient to teach them that a

drone grub could not be converted into a queen, for they sealed up the grubs and waited patiently the time for their hatching. The young drones never hatched, but shrivelled in the cells, which would lead to the conclusion that the food suitable for a young queen is not adapted to bring a drone to perfection.—*From the Transactions of the Berwickshire Naturalists' Club*, vol. ii. p. 205.

METEOROLOGICAL OBSERVATIONS FOR FEB. 1848.

*Chiswick*.—February 1, 2. Clear and fine. 3. Cloudy. 4. Overcast: rain. 5. Densely overcast: heavy rain at night. 6. Overcast and mild. 7. Densely overcast: rain. 8. Cloudy and fine. 9. Cloudy: boisterous: clear. 10. Very fine: heavy rain at night. 11, 12. Very fine. 13. Overcast. 14. Rain. 15. Densely overcast: rain. 16. Frosty: clear and fine. 17. Clear: cloudy and fine. 18. Fine. 19. Rain: hazy and damp. 20. Foggy: cloudy: clear. 21. Overcast: rain. 22. Rain. 23. Heavy clouds: fine. 24. Densely overcast: rain. 25. Rain: showery. 26. Barometer most remarkably low: boisterous, with heavy rain. 27. Heavy rain: clear and boisterous at night. 28. Fine: clear. 29. Very clear: boisterous, with rain at night.

Mean temperature of the month ..... 39°·62  
 Mean temperature of Feb. 1847 ..... 34·79  
 Mean temperature of Feb. for the last twenty years ..... 39·32  
 Average amount of rain in Feb. .... 1·95 inch.

*Boston*.—Feb. 1, 2. Fine. 3. Cloudy. 4. Rain. 5. Cloudy: rain P.M. 6. Rain. 7. Cloudy. 8. Cloudy: rain P.M. 9. Cloudy: rain early A.M.: rain A.M. 10—13. Fine. 14. Rain: rain P.M. 15. Cloudy: rain early A.M. 16—18. Fine. 19. Cloudy: snow early A.M. 20. Rain. 21. Fine: rain P.M. 22. Cloudy: rain P.M. 23. Fine: rain P.M. 24. Cloudy: rain P.M. 25. Fine. 26. Fine: rain early A.M. 27. Cloudy: rain early A.M.: rain A.M. 28. Cloudy. 29. Fine.

*Applegarth Manse, Dumfries-shire*.—Feb. 1. Hard frost A.M.: thaw and rain P.M. 2. Thaw: threatening frost again. 3. Thaw: rain: high wind. 4. Heavy rain: snow gone. 5. Heavy rain: floods. 6. Moist A.M.: showery P.M. 7. Thick fog ending in rain. 8. Heavy rain all day. 9. Rain A.M.: cleared: rain P.M. 10. Slight showers. 11. Very fine spring day. 12. Dull morning: wet P.M. 13. Heavy rain and high winds. 14. Fair, but threatening change. 15. Rain all day. 16. Frost: a shower of snow. 17. Hard frost: hills white: snow. 18. Hard frost: rain P.M. 19. Showery. 20. Beautiful day: slight frost A.M. 21. Raw frost A.M.: moist. 22. Storm of rain and wind: flood. 23. Stormy day: violent showers. 24. Snow for two hours: heavy rain. 25. Fair and milder. 26. Fair A.M.: drizzle P.M. 27. Heavy rain all day. 28. Heavy rain: thunder. 29. Showers: hail.

Mean temperature of the month ..... 40°·1  
 Mean temperature of Feb. 1847 ..... 36·2  
 Mean temperature of Feb. for twenty-five years ..... 37·3  
 Rain ..... 5·53 inches.  
 Mean rain in Feb. for twenty years ..... 2·04 „

*Sandwick Manse, Orkney*.—Feb. 1. Snow showers: cloudy. 2. Frost: clear. 3. Cloudy: showers. 4. Rain: damp. 5. Snow-drift: snow. 6. Snow: cloudy. 7. Rain. 8. Bright: showers. 9. Cloudy: damp. 10. Rain: cloudy. 11. Bright: cloudy. 12. Rain: showers. 13. Showers. 14. Showers: clear. 15. Damp: rain. 16, 17. Bright: frost. 18. Sleet: rain. 19. Sleet-showers: showers. 20. Bright: snow-shower. 21. Snow: red aurora. 22, 23. Cloudy: rain: aurora. 24. Bright: frost: fine: aurora. 25. Showers. 26. Cloudy: showers. 27. Showers: rain. 28. Damp: rain. 29. Clear: cloudy.

The following are the averages for Dec. 1847, with which we have been favoured by our correspondent the Rev. Ch. Clouston of Sandwick Manse, whose usual report miscarried owing to the stormy weather which then prevailed:—

Barometer.		Thermometer.		Rain in inches.
A.M.	P.M.	A.M.	P.M.	
29·597	29·595	39·93	40·66	5·24